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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/074,043

02/14/2002

Gregory M. Chrysler

2207/12666

7585

23838

7590

12/10/2003

KENYON & KENYON  
1500 K STREET, N.W., SUITE 700  
WASHINGTON, DC 20005

EXAMINER

LAVILLA, MICHAEL E

ART UNIT

PAPER NUMBER

1775

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

ebj

<b>Office Action Summary</b>	Application No. 10/074,043	Applicant(s) CHRYSLER ET AL.	
	Examiner Michael La Villa	Art Unit 1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group II, Claims 18-29, in Paper No. 4 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
4. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 18-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.  
  
Regarding Claim 18, it is unclear where applicant teaches in the original disclosure the newly claimed limitation of "a covering layer . . . exhibiting a predetermined roughness and/or predetermined flatness, the covering layer having a thickness just enough to cover a roughness of the free surface of the diamond layer." Regarding Claim 29, it is unclear where applicant teaches the analogous claim limitation with respect to the claimed "means for providing a

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thermal coupling surface.” It is remarked that applicant’s Response does not appear to provide a citations to the original disclosure of antecedent support for these limitations. Regarding Claims 19-28, it is furthermore unclear where the subject matter of each of the dependent claims, in conjunction with the limitations of Claim 18 discussed above, is taught.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  7. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
  8. Claims 18-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
    - I. Regarding Claims 18 and 29, it is unclear what is meant by the phrase “thickness just enough to cover a roughness.” Does this phrase mean that all peaks of the underlying layer terminate at the upper surface of the covering layer, that only the highest peaks terminate at the upper surface of the covering layer or something else? With respect to Claim 18, it is also unclear what is the relationship between this thickness requirement and the requirement that the thermal coupling surface exhibit a predetermined roughness and/or flatness. Do these requirements together demand a non-uniform thickness of the covering layer?

- II. Regarding Claim 18, it is unclear what is meant by the term "predetermined" for the reasons of record in the Office Action mailed on 27 June 2003.

***Response to Amendment***

- III. In view of applicant's amendments and arguments, applicant traverses the section 112, second paragraph rejection of the Office Action mailed on 27 June 2003. Applicant traverses the rejection over the indefiniteness of the term "predetermined" on the grounds that applicant has specified what would be a suitable degree of flatness or roughness in applicant's circumstances. It is unclear why this guidance provided in the Specification necessarily renders the meaning of the term "predetermined" definite. Applicant's claim is not limited to the roughnesses and flatnesses described in the cited portion. It remains unclear in what sense roughness and/or flatness are to be predetermined. Does the claim limitation mean "a covering layer possessing a surface roughness and/or flatness effective for being a thermal coupling surface"? Except as provided above, the section 112, second paragraph rejections of the Office Action mailed on 27 June 2003 are withdrawn.
- IV. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Petkie of the Office Action mailed on 27

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June 2003. Rejection is withdrawn since Petkie does not teach or suggest the claimed thickness/surface roughness relationship.

- V. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Thorpe of the Office Action mailed on 27 June 2003. Rejection is withdrawn since Thorpe does not teach or suggest the claimed thickness/surface roughness relationship.
- VI. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Hall of the Office Action mailed on 27 June 2003. Rejection is withdrawn since Hall does not teach or suggest the claimed thickness/surface roughness relationship.
- VII. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Shiomi of the Office Action mailed on 27 June 2003. Rejection is withdrawn since Shiomi does not teach or suggest the claimed thickness/surface roughness relationship.
- VIII. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Chrysler of the Office Action mailed on 27 June 2003. Rejection is withdrawn since Chrysler does not teach or suggest the claimed thickness/surface roughness relationship.
- IX. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Mahajan of the Office Action mailed on 27 June 2003. Rejection is withdrawn since Mahajan does not teach or suggest the claimed thickness/surface roughness relationship.

***Conclusion***

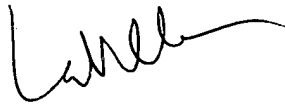
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
10. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (703) 308-4428. The examiner can normally be reached on Monday through Friday.
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.



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13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Michael La Villa  
December 9, 2003

A handwritten signature in black ink, appearing to read 'La Villa', written over the printed name and date.